WE CLAIM

1. A method of operating a transceiver including one or more transmitter antennas, at least one receiver antenna, and one or more propagation channels between the one or more transmitter antennas and the one or more receiver antennas, said method comprising:

receiving a binary stream assembled into groups of bits forming symbol indices; and

generating at least one complex symbol value in response to a reception of the binary stream, each complex symbol value of the at least one complex symbol value being normalized over one or more channel coefficients associated with the one or more propagation channels.

2. The method of claim 1, wherein the at least one complex symbol value is generated according to:

$$x_m = \frac{\sqrt{E_s}(h^*_{i,m})}{\sum_{j=0}^{M_T-1} |h_{i,j}|^2} s_J \quad m = 0,1,\cdots,M_T-1$$

where i is an index of a selected receiver antenna to receive the at least one complex symbol value.

3. The method of claim 1, wherein the at least one complex symbol value is generated according to:

$$X_j[k] = \frac{\sqrt{E_s}(H^*_{i,j}[k])}{\sum_{m=0}^{M_T-1} \left|H_{i,m}[k]\right|^2} s_j[k] \qquad k = 0,1,\cdots,N-1;\ j = 0,1,\cdots,M_T-1$$

where i is an index of a selected receiver antenna to receive the at least one complex symbol value.

4. The method of claim 1, further comprising:

selecting a first receiver antenna of the one or more receiver antennas as a function of a metric proportional to an average injection power corresponding to the first receiver antenna; and

transmitting the at least one complex symbol value from the one or more transmitter antennas to the first receiver antenna.

5. The method of claim 1, further comprising:

selecting a first receiver antenna of the one or more receiver antennas as a function of a vector norm corresponding to the first receiver antenna; and

transmitting the at least one complex symbol value from the one or more transmitter antennas to the first receiver antenna.

6. A transceiver, comprising:

one or more transmitter antennas;

one or more receiver antennas;

one or more propagation channels between said one or more transmitter antennas and said one or more receiver antenna; and

a transmitter operable to generate at least one complex symbol value in response to a reception of a binary stream assembled into groups of bits forming symbol indices, each complex symbol value of the at least one complex symbol value being normalized over one or more channel coefficients associated with said one or more propagation channels.

7. The transceiver of claim 6, wherein said transmitter generates the at least one complex symbol value according to:

$$x_m = \frac{\sqrt{E_s}(h_{i,m}^*)}{\sum_{j=0}^{M_T-1} \left|h_{i,j}\right|^2} s_J \quad m = 0,1,\cdots,M_T - 1$$

where i is an index of a selected receiver antenna to receive the at least one complex symbol value.

8. The transceiver of claim 6, wherein said transmitter generates the at least one complex symbol value according to:

$$X_j[k] = \frac{\sqrt{E_s}(H_{i,j}^*[k])}{\sum_{m=0}^{M_T-1} \left|H_{i,m}[k]\right|^2} s_J[k] \qquad k = 0,1,\cdots,N-1;\; j = 0,1,\cdots,M_T - 1$$

where i is an index of a selected receiver antenna to receive the at least one complex symbol value.

9. The transceiver of claim 6, wherein:

said transmitter is further operable to select a first receiver antenna of said one or more receiver antennas as a function of a metric proportional to an average injection power of corresponding to said first receiver antenna; and

said one or more transmitting antennas are operable to transmit the at least one complex symbol value to said first receiver antenna.

10. The transceiver of claim 6, further comprising:

a receiver operable to select a first receiver antenna of said one or more receiver antennas as a function of a metric proportional to an average injection power corresponding to said first receiver antenna,

wherein said one or more transmitting antennas are operable to transmit the at least one complex symbol value to said first receiver antenna.

11. The transceiver of claim 6, wherein:

said transmitter is further operable to select a first receiver antenna of said one or more receiver antennas as a function of a vector norm corresponding to said first receiver antenna; and

said one or more transmitter antennas are operable to transmit the at least one complex symbol value to said first receiver antenna.

12. The transceiver of claim 6, further comprising:

a receiver operable to select a first receiver antenna of said one or more receiver antennas as a function of a vector norm corresponding to said first receiver antenna,

wherein said one or more transmitting antennas are operable to transmit the at least one complex symbol value to said first receiver antenna.

13. A method of operating a transceiver including one or more transmitter antennas, one or more receiver antennas, and one or more propagation channels between the one or more transmitter antennas and the one or more receiver antenna, said method comprising:

computing a metric proportional to an average injection power for each receiver antenna of the one or more receiver antennas;

selecting a first antenna of the one or more receiver antennas having a smallest average injection power to receive at least one complex value symbol from the one or more transmitter antennas.

14. The method of claim 13, wherein all computations of the metric proportional to the average injection power are according to:

$$AIP_i = \frac{1}{\sum_{j=0}^{M_T-1} \left|h_{i,j}\right|^2}$$

15. The method of claim 13, wherein all computations of the metric proportional to the average injection power are according to:

$$AIP_i = \sum_{k=0}^{N-1} \left(\frac{1}{\sum_{j=0}^{M_T-1} \left|H_{i,j}[k]\right|^2} \right)$$

16. A method of operating a transceiver including one or more transmitter antennas, one or more receiver antennas, and one or more propagation channels between the one or more transmitter antennas and the one or more receiver antenna, said method comprising:

computing a vector norm for each receiver antenna of the one or more receiver antennas;

selecting a first antenna of the one or more receiver antennas having a largest vector norm to receive at least one complex value symbol from the one or more transmitter antennas.

17. The method of claim 16, wherein all computations of the vector norm are according to:

$$VN_i = \sum_{j=0}^{M_T-1} \left|h_{i,j}\right|^2 = \|\mathbf{h}_i\|_2^2$$

18. The method of claim 16, wherein all computations of the vector norm are according to:

$$VN_i = \sum_{k=0}^{N-1}\left(\sum_{j=0}^{M_T-1} \left|H_{i,j}[k]\right|^2\right) = \sum_{k=0}^{N-1} \|\mathbf{H}_i[k]\|_2^2$$

19. A transceiver, comprising:

one or more transmitter antennas;

one or more receiver antennas;

one or more propagation channels between said one or more transmitter antennas and said one or more receiver antenna; and

a module operable to compute a metric proportional to an average injection power for each receiver antenna of said one or more receiver antennas, said module further operable to select a first antenna of said one or more receiver antennas having a smallest average injection power to receive at least one complex value symbol from said one or more transmitter antennas.

20. The transceiver of claim 19, wherein said module performs all computations of the metric proportional to the average injection power according to:

$$AIP_i = \frac{1}{\sum_{j=0}^{M_T-1} \left|h_{i,j}\right|^2}$$

21. The transceiver of claim 19, wherein said module performs all computations of the metric proportional to the average injection power according to:

$$AIP_i = \sum_{k=0}^{N-1} \left(\frac{1}{\sum_{j=0}^{M_T-1} \left|H_{i,j}[k]\right|^2} \right)$$

22. A transceiver, comprising:

one or more transmitter antennas;

one or more receiver antennas;

one or more propagation channels between said one or more transmitter antennas and said one or more receiver antenna; and

a module operable to compute a vector norm for each receiver antenna of said one or more receiver antennas, said module further operable to select a first antenna of said one or more antennas having a largest vector norm to receive at least one complex value symbol from said one or more transmitter antennas.

23. The transceiver of claim 22, wherein said module performs all computations of the vector norm according to:

$$VN_i = \sum_{j=0}^{M_T-1} \left| h_{i,j} \right|^2 = \left\| \mathbf{h}_i \right\|_2^2$$

24. The transceiver of claim 22, wherein said module performs all computations of the vector norm according to:

$$VN_i = \sum_{k=0}^{N-1} \left(\sum_{j=0}^{M_T-1} \left| H_{i,j}[k] \right|^2 \right) = \sum_{k=0}^{N-1} \left\| \mathbf{H}_i[k] \right\|_2^2$$